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RESEARCH ARTICLE

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The availability of LGBT-specific mental health and substance abuse treatment in the United States

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Abstract

Objective: To examine the availability and facility-level predictors of LGBT-specific mental health and substance abuse treatment in the United States.

Data Sources/Study Setting: 2016 National Survey of Substance Abuse Treatment Services, 2016 National Mental Health Service Survey, and 2015-2016 Gallup Daily tracking survey.

Study Design: Logistic regression models and average marginal effects were used to identify characteristics of facilities that offer LGBT-specific programs. Linear regression models were used to estimate the association between the state-level proportion of LGBT people and the proportion of facilities that offer LGBT-specific programs.

Data Collection/Extraction Methods: Secondary data analysis. Cases with missing values for any predictor were excluded.

Principle Findings: 12.6 percent of mental health and 17.6 percent of substance abuse facilities reported LGBT-specific programs. Several facility characteristics were statistically associated with the likelihood of mental health and substance abuse facilities providing LGBT-specific programs, including offering outpatient or residential treatment, private ownership, religious affiliation, and payment type. The proportion of LGBT adults living within each state was statistically associated with state-level density of LGBT-specific mental health programs, but not substance abuse programs.

Conclusions: Findings suggest limited availability of culturally competent mental health and substance abuse treatment, despite well-documented need.

KEYWORDS

mental health, sexual and gender minorities, substance abuse, treatment

1 | INTRODUCTION

In the United States (US), nearly 47 million people meet the criteria for a mental, behavioral, or emotional disorder[1] and approximately 20 million people meet the criteria for a substance use disorder (SUD) in a given year.[1,2] Lesbian, gay, bisexual, and transgender (LGBT) people are populations at elevated risk for mental health disorders, substance abuse, and psychiatric comorbidity relative to their heterosexual and cisgender peers.[3-8] Sexual minority adults, for example, have between 1.6 and 3.1 times the odds of lifetime SUD compared to their heterosexual counterparts,[9] and LGBT adults are more likely to meet the criteria for major depression, anxiety, and to report suicidal ideation and attempt.[10-14]

Minority stress theory helps to explain these disparities;[15-19] it identifies stigma and discrimination as key mechanisms of sexual orientation-related health inequities. For example, evidence suggests that LGBT people in substance abuse treatment present

with more complex needs, including higher mental health comorbidity, greater severity, and poorer physical health due to minority stress.[3,20-22] Additionally, this same stigma and discrimination prevent LGBT people from accessing and engaging with quality mental health care services attuned to their unique experiences and needs. In many ways, the lack of adequate mental health care compounds and maintains population-level mental health inequities for this population. Conversely, mental health care services that are sensitive to the needs of LGBT clientele show promising reductions in mental health symptomology and substance use;[23-26] however, the availability of LGBT-sensitive services is largely unknown. As such, the current study seeks to assess the degree to which LGBT-specific services are available using two national samples of state-approved mental health and substance abuse facilities in the United States, and the characteristics of facilities that offer LGBT-specific services.

What this study adds

- Few state-approved substance abuse and mental health facilities reported offering programs specifically for LGBT clients.
- The likelihood of offering LGBT-specific services varied by several contextual factors including private ownership, religious affiliation, and payment type.
- The proportion of LGBT residents in a state was positively related to the proportion of mental health facilities in that state offering LGBT-specific programs; this association was not present for substance abuse facilities.

1.1 | LGBT people and barriers to culturally competent care

Structural barriers prevent many people from engaging in mental health and substance use (MH/SU) treatment. These include cost, insurance coverage, stigma around MH/SU disorders, and availability of services.[27,28] From 2011 to 2013, approximately 86 percent of people with an SUD in the past year did not receive care,[2] and in 2017, only 43 percent of US adults with a mental illness received mental health services in the past year.[1] Although LGBT people are more likely to seek out treatment than their heterosexual peers,[3,9,29,30] they face a number of unique barriers in accessing quality treatment: Many service providers hold negative attitudes toward LGBT people or lack adequate knowledge about their unique mental health needs.[31-34] Further, heteronormative treatment practices that ignore the unique experiences of LGBT people (eg, assumptions about the sex/gender of partners, misgendering clients) may be perceived as exclusionary and discriminatory by LGBT clients.[32,35-37]

Research consistently demonstrates that behavioral and mental health practitioners lack competence and comfort when working with LGBT clients which further alienates LGBT people when seeking care.[35,38-40] LGBT clients who experience nonaffirming behaviors from providers (eg, blaming the presenting problem[s] on LGBT identity, lacking basic knowledge of LGBT issues, prejudice against LGBT persons) are less satisfied with treatment and less likely to return after their first session.[33,41] Perhaps, not surprisingly, LGBT individuals often seek out health care providers that have a stated affirmative practice, even when the presenting problem is not related to their sexual orientation or gender identity.[42] Given these experiences and the unique barriers and needs of LGBT individuals seeking MH/SU treatment, researchers and informed practitioners have advocated for the cultivation of culturally competent treatment to address the MH/SU disparities evidenced by LGBT populations.

1.2 | The importance and availability of LGBT-specific treatment models

As health services research continues to document disparities in health outcomes and access to services, culturally competent care has emerged as one solution. The US Department of Health and Human Services defines culturally competent programs as those that "maintain a set of attitudes, perspectives, behaviors, and policies – both individually and organizationally – that promote positive and effective interactions with diverse cultures".[43] Researchers have studied the impact of providing culturally competent health services, linking levels of provider cultural competence with increased client satisfaction and improved care access and utilization.[44,45] Indeed, mental and behavioral health practitioners recognize the importance of cultural competence, with many professional organizations setting expectations for cultural competence in their codes of ethics and training program accreditation guidelines.[46-48]

Scholars have long called for LGBT-specific treatment as a means of providing culturally competent care.[49] Several studies now show promising results for LGBT-specific treatment modalities. A study of men in New York found that both heterosexual and gay/bisexual men had better treatment outcomes in LGBT-specific substance abuse programs than gay/bisexual men in "traditional" (ie, non LGBT-specific) programs.[23] In another study that investigated perceptions of treatment, LGB people who had recently participated in a traditional substance abuse program reported lower levels of satisfaction with treatment than their heterosexual counterparts; the majority perceived their sexual orientation as having a negative effect on their time in treatment.[24] Gay and bisexual men, as compared to heterosexual men, were less likely to have completed the traditional program and were more likely to have cited terminating treatment prematurely due to unmet needs.[24] There are similar findings regarding mental health treatment: LGB adults are often less satisfied with services than their heterosexual counterparts.[25] Importantly, LGB-specific treatment

strategies appear to be more efficacious for sexual minorities. Pachankis and colleagues[26] found preliminary support for the use of a cognitive-behavioral treatment adapted to address sexual orientation-related minority stress in young gay and bisexual men. Compared to waitlist clients, those receiving the adapted treatment experienced statistical reductions in depressive symptoms and alcohol use problems. Despite promising research on the efficacy of LGBT-specific services, the availability of these services is largely unknown.

The only known large-scale study on the availability of specialized LGBT services used the National Survey of Substance Abuse Treatment Services (N-SSATS) to explore whether facilities with specialized programming provided the corresponding key services as defined by the Substance Abuse and Mental Health Services Administration (SAMHSA).[50] Researchers found that facilities with LGBT-specific programs were more likely than those without to provide key services including HIV testing, STD testing, hepatitis testing, and HIV education, counseling, and support.[51] These findings suggest that organizations with LGBT-specific programming may be better attuned to the unique needs of LGBT clients.

1.3 | The current study

Given the disproportionate mental and behavioral health burden among LGBT populations,[3-8] and the promising solutions offered by LGBT-specific services,[23-26] the current study seeks to address three aims about the availability of LGBT-specific services using two national samples of state-approved mental health and substance abuse service organizations. First, we assess how many mental health and substance abuse facilities offer LGBT-specific programs. Second, we are interested in assessing the characteristics (eg, treatment type, ownership and funding, capacity, and payment types) of mental health and substance abuse facilities that offer LGBT-specific programs (as compared to those who do not). Specifically, we examine the type of treatment offered (ie, inpatient, outpatient, and residential), as the clients utilizing these treatment types vary in the frequency and duration of their use of the facility.[52,53] Additionally, hospital affiliation,[54] religious affiliation,[55] ownership type,[56] and receipt of government funds[56] may affect a facility's population-specific program offerings. These factors reflect differences in the bureaucracies and structures of mental health substance abuse treatment facilities that dictate how they operate and their ability to adapt program components to client needs. The ways that facilities allow their clients to pay (Medicaid, Medicare, sliding fee scale, free services) may also reflect the resources available to the facility and the types of clients they typically serve.[57,58] Finally, we test the association between state-specific density of LGBT people and the number of facilities that offer LGBT-specific mental health and substance abuse programs in each state. Findings offer structural-level context for the availability of LGBT culturally competent programs as one approach to eliminating mental and behavioral health disparities.

2 | METHODS

2.1 | Data sources and samples

Three sources of data were used in the current study. Information about treatment facilities comes from the 2016 N-SSATS and the 2016 National Mental Health Services Survey (N-MHSS). State-level LGBT population density data come from the Gallup Daily Tracking Survey.

The N-SSATS and N-MHSS are directed by SAMHSA's Center for Behavioral Health Statistics and Quality. Both surveys are designed to collect information on the location, characteristics, and use of outpatient, residential, and hospital inpatient programs throughout the United States. All facilities surveyed are licensed by their respective states as specialty mental health and/or substance abuse clinics or centers. The N-SSATS and N-MHSS do not include Department of Defense military treatment facilities, individual private practitioners, small group practices not licensed as a mental health clinic or center, or jails and prisons.[59,60] Survey responses are collected via web-based questionnaire, paper questionnaire by mail, and telephone interview. As part of the survey, facilities were asked whether they offered programs for specific populations, including those who identify as LGBT. Facilities also offered information about their operations and service provision. The surveys provide prevalence information for a given day as opposed to annual totals. Both the N-SSATS and N-MHSS reported an item response rate of approximately 98 percent.[59,60] For analysis of the N-SSATS, we excluded facilities missing on facility characteristic items (n = 1355 or 9.4 percent of 14 399 facilities)—there were no missing values for the item assessing whether or not facilities offered LGBT-specific services. This resulted in a final analytic sample of 13 044 facilities. For the N-MHSS, we used the same exclusion criteria, which removed 896 facilities, leaving an analytic sample of 11 269 facilities.

Gallup LGBT population estimates are based on the Gallup Daily Tracking Survey. Gallup conducts daily phone interviews of 1000 US adults aged 18 and older living in all 50 states and the District of Columbia, 350 days a year. Participants are contacted using random-digit-dial methods for landline and cellphone numbers. Landline respondents are chosen at random within each household based on members' next upcoming birthday. Daily samples are evenly split between cellphone and landline respondents. Gallup also implements minimum quotas across time zones within each region to prevent, for example, disproportionate inclusion of individuals in the Central Time Zone in the Southern US region. The data used in this analysis were collected between January 1, 2015, and December 30, 2016 (N = 710 252).

2.2 | Measures

2.2.1 | Dependent variables

To gauge whether N-MHSS and N-SSATS facilities were offering LGBT-specific programs, facilities were asked "Does this facility offer a mental health treatment program or group that is dedicated or designed exclusively for clients in any of the following categories?" of which "Lesbian, gay, bisexual, transgender (LGBT) clients" was one category. Respondents were instructed "If this facility treats clients in any of these categories, but does not have a specifically tailored program or group for them, DO NOT mark the box for that category."

State-level densities of MH/SU facilities were calculated by generating the proportion of each state's total number of facilities that reported offering LGBT-specific programs. State-level density of LGBT people was captured by the Gallup Daily Tracking Survey, which asked participants "Do you personally identify as lesbian, gay, bisexual, or transgender?" Gallup reports the proportion of individuals surveyed in each state that responded in the affirmative. These estimates have been used in previous studies[61-63] and may be higher than other population-based surveys (eg, National Health Interview Survey, General Social Survey) for two reasons. First, the Gallup survey is administered over the phone, while similar surveys are conducted as in-home interviews. The relative anonymity of data collection over the phone may increase a respondent's willingness to identify as LGBT. Second, Gallup is unique in that rather than asking respondents to enumerate their identity (Are you heterosexual, homosexual, bisexual, etc?), they ask "Do you personally identify as lesbian, gay, bisexual, or transgender?", allowing respondents to identify as a member of the LGBT community without the level of specificity required in other surveys.[64]

2.2.2 | Independent variables

For the N-SSATS, we were interested in assessing several facility characteristics in relation to offering LGBT-specific programs, including facility type (ie, inpatient, outpatient, residential, and hospital affiliation), receipt of government grants, and payment options (ie, sliding fee, free services, Medicare, and Medicaid). Response options for each of these questions were yes or no. We were also interested in whether these facilities varied in ownership, which was assessed with the question "Is this facility operated by (mark only one)." Response options included private for-profit organization, private nonprofit organization, state government, local, county or community government, tribal government, and federal government. We assessed similar facility characteristics in the N-MHSS: facility type (ie, inpatient, outpatient, residential, and religious), and payment options (ie, sliding fee, free, Medicare, and Medicaid), with a yes or no response. Respondents were asked whether the facility was private for-profit, private nonprofit, or public.

2.3 | Analytic approach

Stata 15.1[65] was used for data management and analysis. First, we used chi-square test of independence to examine the bivariate association between each facility characteristic and LGBT-specific program offerings. Next, logistic regression models were fit to assess which characteristics were most strongly associated with LGBT-specific service offerings. Finally, linear regression was used to test the association between the state-level proportions of LGBT people and facilities offering LGBT-specific programs.

3 | RESULTS

Just under 18 percent of state-approved substance abuse facilities and 12.6 percent of state-approved mental health facilities reported offering programs specifically for LGBT clients.

3.1 | Facility characteristics associated with LGBT-specific programs

Several characteristics were statistically associated with offering LGBT-specific programs among mental health and substance abuse facilities (Table 1). In mental health facilities, those offering inpatient services (10.69 percent) were less likely to offer LGBT-specific services than those that did not offer inpatient services (12.35 percent). Facilities offering outpatient treatment (12.70 percent) and residential care (13.60 percent) were more likely to offer LGBT-specific programs compared to those not offering these types of care (10.21 and 11.77 percent, respectively). Facilities that were not religiously affiliated (12.28 percent) were more likely to offer LGBT-specific programs than those with some religious affiliation (9.28 percent). LGBT program offerings also varied by ownership, with public facilities being least likely (9.93 percent) to offer these programs compared to private nonprofit (11.84 percent) and private for-profit (14.84 percent). Facilities that accepted payment types often indicative of serving lower socioeconomic status clients (sliding fee scale, free treatment, Medicare, or Medicaid) did not differ in offering LGBT-specific programs from facilities that did not offer these payment and insurance options.

Among substance abuse facilities, those offering residential care (21.24 percent) were significantly more likely to offer LGBT-specific programs than facilities that did not offer residential treatment (16.84 percent). Facilities located in hospitals (11.95 percent) were less likely than those outside of hospital locations (18.19 percent) to offer LGBT-specific programs. Again, offering LGBT-specific programs varied significantly by ownership type, with private for-profit facilities most likely (21.79 percent) and local or county government facilities least likely (10.02 percent) to offer LGBT-specific programs. Facilities receiving government funds were less likely to offer LGBT-specific programs (15.88 percent) than those who reported no government funding (19.72 percent). Facilities that provided a sliding fee

TABLE 1 Bivariate associations between facility characteristics and LGBT services

	Mental health facilities (n = 11 269)				Substance abuse facilities (n = 13 044)			
	LGBT services	No LGBT services			LGBT services	No LGBT services		
	%	%	$\chi^2(df)$	P	%	%	$\chi^2(df)$	P
Treatment type								
Inpatient								
Yes	10.69	89.31	4.05 (1)	.044	16.19	83.81	0.93 (1)	.334
No	12.35	87.65			17.70	82.30		
Outpatient								
Yes	12.70	87.30	12.38 (1)	<.001	17.36	82.64	2.88 (1)	.090
No	10.21	89.79			18.85	81.15		
Residential								
Yes	13.60	86.40	4.98 (1)	.026	21.24	78.76	37.14 (1)	<.001
No	11.77	88.23			16.84	83.52		
Religious affiliation								
Yes	9.28	90.72	5.94 (1)	.015				
No	12.28	87.72						
Ownership type								
Private for-profit	14.84	85.16	22.90 (2)	<.001	21.79	78.21	100.43 (5)	<.001
Private nonprofit	11.84	88.16			15.86	84.14		
Public	9.93	90.07						
State government					15.25	84.75		
Local or county government					10.02	89.98		
Tribal government					16.31	83.69		
Federal government					13.50	86.50		
Hospital affiliation								
Yes					11.95	88.05	28.79 (1)	<.001
No					18.19	81.81		
Government funds								
Yes					15.88	84.12	32.79 (1)	<.001
No					19.72	80.28		
Payment types								
Sliding fee scale								
Yes	12.34	87.66	0.94 (1)	.333	18.40	81.60	8.00 (1)	.005
No	11.74	88.26			16.48	83.52		
Free treatment								
Yes	12.05	87.95	0.01 (1)	.932	18.53	81.47	6.26 (1)	.012
No	12.11	87.89			16.85	83.15		
Medicare								
Yes	11.76	88.24	2.57 (1)	.109	17.19	82.81	0.89 (1)	.346
No	12.85	87.15			17.85	82.15		
Medicaid								
Yes	11.89	88.11	3.79 (1)	.052	16.80	83.20	10.17 (1)	.001
No	14.03	85.97			19.00	81.00		

Note: Blank spaces in the table reflect the absence of those variables in the dataset and exclusion from analysis.

scale (18.40 percent) or free treatment (18.53 percent) were more likely to report LGBT-specific programs than those that did not offer these payment options (16.48 and 16.85 percent, respectively). Facilities accepting Medicaid (16.80 percent) were significantly less likely to offer LGBT-specific programming than those facilities that did not (19.00 percent); Medicare acceptance was not associated with offering LGBT-specific programs. Providing outpatient care or inpatient care was not associated with having LGBT-specific programs.

3.2 | Multivariate analyses

Predicted probabilities and average marginal effects from multivariate logistic regression models assessing the degree to which facility characteristics were associated with the presence of LGBT-specific services are presented in Table 2. Among mental health care facilities, LGBT-specific services were more prevalent among facilities providing residential (marginal effect [ME]=5.61 percent; 95% CI, 3.10 to 8.11 percent) and outpatient services (ME = 5.03 percent; 95% CI, 3.40 to 6.66 percent) than those facilities that did not offer these services. Compared to private for-profit facilities, a significantly smaller proportion of private nonprofit (ME = −3.18 percent; 95% CI, −5.00 to −1.37 percent) and public facilities (ME = −5.36 percent; 95% CI, −7.53 to −3.19 percent) offered LGBT-specific services. Facilities that were affiliated with a religious organization were less likely to offer LGBT-specific programs when compared to those with no religious affiliation (ME = −2.66 percent; 95% CI, −4.92 to −0.41 percent). The prevalence of LGBT-specific mental health services did not significantly vary by whether a facility offered inpatient treatment or by payment type (ie, acceptance of Medicare or Medicaid, offering services on a sliding fee scale or at no-cost).

Among substance abuse treatment facilities, results revealed several characteristics associated with LGBT-specific programs. Facilities providing residential (ME = 9.27 percent; 95% CI, 6.79 to 11.76 percent) and outpatient services (ME = 2.75 percent; 95% CI, 0.57 to 4.94 percent) were more likely to offer LGBT-specific programs than facilities that did not offer these services. Private nonprofit (ME = −7.98 percent; 95% CI, −9.93 to −6.03 percent) and all types of publicly funded facilities (ME from −13.04 to −5.86 percent) were less likely than private for-profit facilities to offer LGBT-specific programs. Facilities that were affiliated with a hospital were less likely to offer LGBT-specific programs when compared to those without a hospital affiliation (ME = −5.69 percent; 95% CI, −8.29 to −3.09 percent) and facilities receiving government funding were less likely than facilities that did not receive government dollars to offer these programs (ME = −2.96 percent; 95% CI, −4.72 to −1.20 percent). Facilities that provide a sliding fee scale (ME = 3.53 percent; 95% CI, 2.10 to 4.97 percent) or free services (ME = 4.32 percent; 95% CI, 2.81 to 5.83 percent) were more likely to offer LGBT-specific programs compared to those that did not offer these payment options. Further, 19.44 percent of facilities that accepted Medicare offered LGBT-specific programs compared to 16.82 percent of facilities that did not accept Medicare (ME = 2.62 percent; 95% CI, 0.98 to 4.27 percent). Acceptance of Medicaid did not predict LGBT-specific programs.

3.3 | Associations between state-level LGBT population density and LGBT-specific program density

Fifty states were included in the regression analysis testing the association between LGBT population and LGBT program density. The District of Columbia was identified as a multivariate outlier for both the proportion of LGBT individuals and the proportion of facilities offering specialized programs using the DFBETA function in Stata. Results from our linear regression model (see Figure 1) demonstrate a significant relationship between the proportion of LGBT people within a given state and the proportion of facilities in that same state that offer LGBT-specific mental health programs ($b = 3.38$, $P < .001$). There was not a statistical association between LGBT population density and the proportion of substance abuse facilities that offered LGBT-specific programs ($b = 2.03$, $P = .11$).

4 | DISCUSSION

The current study sought to document the prevalence of LGBT-specific programs, examine the characteristics of facilities that offer LGBT-specific programs, and test the association between LGBT population and program density across the United States. Generally, findings suggest a lack of LGBT-specific programs in state-approved mental health and substance abuse treatment facilities. Fewer than one in five substance abuse facilities and one in eight mental health facilities reported LGBT-specific programs, suggesting that many facilities may not be equipped to meet the unique needs of LGBT clients. Given well-documented sexual orientation and gender identity disparities in mental health and substance use disorders,[3-7,13,17] coupled with research highlighting the efficaciousness of LGBT-specific services,[23-26] the lack of LGBT-specific service availability is concerning. Culturally competent treatment services are important for improving the disparities experienced by LGBT individuals. The findings presented here extend current LGBT mental health and substance abuse treatment research by offering a more macrosystemic investigation into the availability of culturally competent, LGBT-specific treatment options in the United States. Findings urge policymakers and practitioners to consider the unmet treatment needs of this population, and solutions to address them.

Our results also suggest that facilities that offer LGBT-specific programs systematically differ in important ways from facilities that do not offer these programs. For example, 15 percent of private for-profit mental health facilities and 23 percent of private for-profit substance abuse facilities offered LGBT-specific services relative to 10-12 percent of private nonprofit and 10-17 percent of public mental health and substance abuse facilities. These findings

TABLE 2 Predicted probabilities and average marginal effects (AME) of facility characteristics on offering LGBT services

Mental health facilities (n = 11 269)				Substance abuse facilities (n = 13 044)			
	Probability	AME	95% CI		Probability	AME	95% CI
Treatment type				Treatment type			
Inpatient				Inpatient			
No	11.92%			No	17.51%		
Yes	13.05%	1.12%	−0.97%, 3.22%	Yes	20.40%	2.89%	−1.40%, 7.18%
Outpatient				Outpatient			
No	8.51%			No	15.44%		
Yes	13.55%	5.03%*	3.40%, 6.66%	Yes	18.19%	2.75%*	0.57%, 4.94%
Residential				Residential			
No	11.30%			No	15.66%		
Yes	16.90%	5.61%*	3.10%, 8.11%	Yes	24.93%	9.27%*	6.79%, 11.76%
Religious affiliation							
No	12.25%						
Yes	9.59%	−2.66%*	−4.92%, −0.41%				
Ownership type				Ownership type			
Private for-profit	15.05%			Private for-profit	23.10%		
Private nonprofit	11.86%	−3.18%*	−5.00%, −1.37%	Private nonprofit	15.12%	−7.98%*	−9.93%, −6.03%
Public	9.69%	−5.36%*	−7.53%, −3.19%	State government	14.49%	−8.61%*	−12.98%, −4.23%
				Local or county government	10.06%	−13.04%*	−15.96%, −10.11%
				Tribal government	17.24%	−5.86%*	−11.16%, −0.55%
				Federal government	16.74%	−6.36%*	−12.11%, −0.61%
				Hospital affiliation			
				No	18.12%		
				Yes	12.43%	−5.69%*	−8.29%, −3.09%
				Government funds			
				No	19.21%		
				Yes	16.25%	−2.96%*	−4.72%, −1.20%
Payment types				Payment types			
Sliding fee scale				Sliding fee scale			
No	11.61%			No	15.58%		
Yes	12.44%	0.82%	−0.55%, 2.20%	Yes	19.11%	3.53%*	2.10%, 4.97%
Free treatment				Free treatment			
No	11.71%			No	15.76%		
Yes	12.42%	0.70%	−0.58%, 1.98%	Yes	20.08%	4.32%*	2.81%, 5.83%

(Continues)

TABLE 2 (Continued)

Mental health facilities (n = 11 269)				Substance abuse facilities (n = 13 044)			
	Probability	AME	95% CI		Probability	AME	95% CI
Medicare				Medicare			
No	12.38%			No	16.82%		
Yes	11.95%	−0.43%	−1.91%, 1.04%	Yes	19.44%	2.62%*	0.98%, 4.27%
Medicaid				Medicaid			
No	13.63%			No	17.93%		
Yes	11.93%	−1.70%	−4.04%, 0.64%	Yes	17.43%	−0.50%	−2.09%, 1.10%

Note: Blank spaces in the table reflect the absence of those variables in the dataset and exclusion from analysis.
AME = average marginal effect (difference in predicted probabilities) 95% CI = 95% confidence interval
*AME significant at $P < .05$, **AME significant at $P < .01$,***AME significant at $P < .001$.

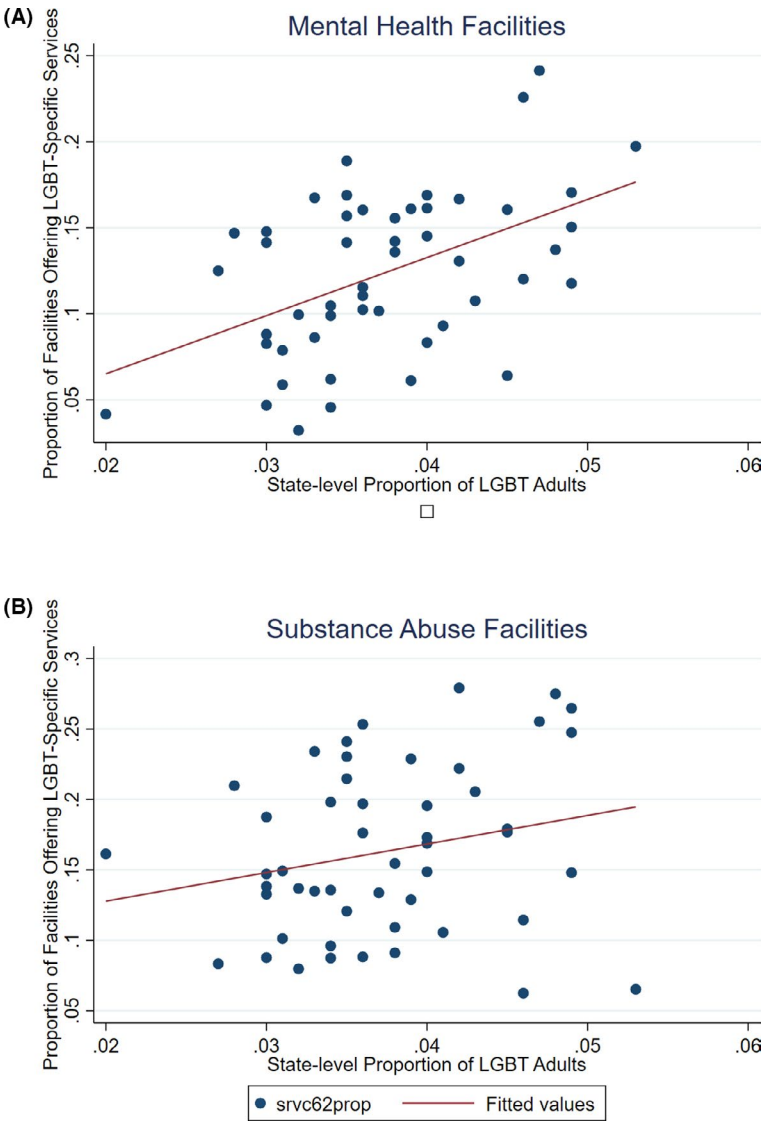

FIGURE 1 Association between state-level LGBT population density and LGBT-specific programs [Color figure can be viewed at wileyonlinelibrary.com]
Note: Mental health facilities ($b = 3.38$, $P < .001$); substance abuse facilities ($b = 2.03$, $P = .11$)

suggest that there may be a degree of flexibility in private for-profit facilities regarding population-specific programs that public and nonprofit facilities may not have. The consistency with which we see the associations between specific facility characteristics and LGBT program offerings across mental health and substance abuse treatment facilities offer additional support in our findings. For

example, for both types of treatment, facilities providing residential or outpatient care were more likely to offer LGBT-specific services. This may be related to the frequency and duration of services based on treatment type. For instance, inpatient treatment is typically intensive but short in duration as facilities work to stabilize clients in mental health crisis or in need of detoxification. The need for population-specific services may be better met in residential facilities where clients are in the treatment environment 24 hours a day, or in outpatient settings where treatment may be less frequent but longer in duration.

At the same time, we see that mental health and substance abuse facility characteristics associated with LGBT-specific service offerings diverge in important ways. For example, payment options (eg, sliding fee scale, free services, and Medicaid acceptance) were not significantly associated with LGBT-specific services for mental health facilities, but increased the odds of substance abuse facilities offering LGBT-specific services. It is possible that substance abuse facilities are better able to offer services at lower cost due to receipt of government grants, a characteristic that was also associated with offering LGBT-specific programs. Although not assessed among substance abuse facilities, it is important to note that mental health facilities with a religious affiliation were significantly less likely than those without a religious affiliation to offer LGBT-specific services. This likely reflects the complex relationship between many dominant US religious organizations and LGBT people.[66-68] Even with acknowledging the diversity of LGBT acceptance across different religious denominations,[69] there is still a strong and prominent history that reflects a tenuous relationship between religious organizations and LGBT people. Our findings likely reflect this ongoing tension.

We were also interested in understanding whether states that had a greater proportion of LGBT people might be more likely to have state-approved facilities that offer LGBT-specific programs. Although state-level LGBT population density was associated with the availability of LGBT-specific mental health treatment programs, this was not the case for substance abuse treatment programs. For mental health treatment facilities, a 1 percent change in LGBT population density was associated with a 3 percent change in the proportion of facilities that offer LGBT-specific services. These findings are promising in that it appears that mental health facilities are recognizing the needs of their local LGBT populations, or it may be that state-level policies and recommendations encourage LGBT-specific services in states with larger LGBT populations. Future research should examine the relationship between LGBT population density, policy, and availability of LGBT-specific services. The null association between LGBT population density and the proportion of substance abuse facilities offering LGBT-specific programs indicates a gap between population need and supply of services. Considering that LGBT people report high rates of substance abuse,[70-74] the lack of available substance abuse treatment programs that consider the needs of LGBT people deserves focused research and policy attention.

4.1 | Limitations and future directions

There are several limitations in the current study that spark fruitful areas of future research. It is possible that LGBT-specific programs were over-reported in the data. At least one study has found that facilities may inaccurately report offering these programs.[75] Therefore, our results may in fact overestimate the degree to which LGBT-specific services are offered in the United States. Future work should develop more accurate assessments of the availability and delivery of LGBT-specific programs. We also were not able to ascertain which types of programs were deemed to be LGBT-specific. For example, were treatment modalities adapted specifically for LGBT clients? Or did facilities interpret policies that enumerate LGBT identities as being LGBT-specific programs? Future work should explore how facilities define cultural competency and delineate "LGBT-specific" programs. Additionally, offering these culturally competent services may differ by treatment modality (eg, group therapy, individual therapy, and family therapy); unfortunately, the data did not allow for us to assess these factors. Furthermore, it would be important to explore how these facilities come to offer LGBT-specific programs. Are facilities mandated to provide LGBT-specific services by governing bodies (eg, state policy, mental health accreditation, and ethical standards)? Or are facilities responding to the needs of clientele?

It is also important to note that the N-MHSS and N-SSATS only survey state-approved facilities. Given that licensing and credentialing requirements for mental health and substance abuse facilities vary by state, it is difficult to broadly report on the implications of this inclusion criterion. Given that individual practitioners and small group practices were generally excluded (unless a state board explicitly requested their inclusion), it is possible that the prevalence of LGBT-specific services is underestimated by this dataset. There are numerous LGBT affirming individual clinicians nationwide that were likely not captured in these surveys.

We were also limited in our ability to make more precise estimates of how LGBT population density is related to the availability of LGBT-specific services. Future research should consider how to assess population and facility density associations for more granular geographic areas (eg, county, zip code), and investigate additional geographic indicators that influence mental health and substance abuse treatment availability, like urbanicity and local funding allocations for treatment service access. It is likely that LGBT-specific program providers are in more urban areas,[76] which further disenfranchises LGBT people living in rural areas. Finally, it is notable that both facility surveys assessed program offerings for sexual and gender minorities together (ie, LGB and T). However, social and scientific progress of cisgender sexual minorities have outpaced that of transgender and gender diverse people. Therefore, it is likely that many of the service providers who stated offering services for LGBT people are reporting services specifically tailored to LGB people, but not explicitly transgender people.[77] This distinction is important as there are critical differences in the experiences and health needs of sexual and

gender minorities. Future work should seek to explore availability of services for both sexual and gender minorities together, and independently, as findings would offer vital information for the availability of services for these two distinct groups.

5 | CONCLUSIONS

Given the overwhelming mental health and substance abuse burden among LGBT populations, as well as emergent evidence on the efficaciousness of LGBT-tailored programs, it is critical that LGBT people have access to culturally competent treatment options. Our findings highlight that the national prevalence of LGBT-specific mental health and substance abuse treatment programs is alarmingly low. Researchers should continue to draw attention to the availability, or lack thereof, of LGBT-specific mental health and substance abuse services in the hopes that practitioners, policymakers, and other key stakeholders address the unmet needs of LGBT people seeking affirming services. This is a critical task in a multipronged effort to eliminate LGBT population health disparities in the United States.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

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